

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. **[Previously Presented]** A method for selective deposition of molecules, comprising the steps of:

- (a) providing a reactive layer comprising a surface region coated with a resist that is biologically compatible with the reactive layer;
- (b) selectively removing a portion of the biologically compatible resist from the surface region to expose an exposed portion of the reactive layer; and
- (c) conjugating molecules with the exposed portion of the reactive layer.

Claim 2. **[Previously Presented]** The method of claim 1, wherein the reactive layer comprises a polysaccharide mass.

Claim 3. **[Previously Presented]** The method of claim 2, wherein the polysaccharide mass comprises chitosan.

Claim 4. **[Previously Presented]** The method of claim 2, further comprising depositing a selectively insolubilizable polysaccharide on a substrate to form the polysaccharide mass.

Claim 5. **[Previously Presented]** The method of claim 4, wherein said depositing comprises providing an aqueous solution comprising the selectively insolubilizable polysaccharide and having an initial pH, contacting the aqueous solution with the substrate, and altering the pH of the aqueous

solution to insolubilize and deposit the selectively insolubilized polysaccharide on the substrate as a film of the polysaccharide mass.

Claim 6. **[Previously Presented]** The method of claim 4, wherein said depositing comprises providing an aqueous solution comprising the selectively insolubilizable polysaccharide and having an initial pH, electrochemically depositing the selectively insolubilizable polysaccharide on an electrically conductive support of the substrate, and altering the pH of the aqueous solution to stabilize the selectively insolubilized polysaccharide on the electrically conductive support.

Claim 7. **[Previously Presented]** The method of claim 1, wherein the biologically compatible resist comprises a gelatin thermoresist.

Claim 8. **[Previously Presented]** The method of claim 1, wherein said selective removing comprises biolithography.

Claim 9. **[Previously Presented]** The method of claim 1, wherein the biologically compatible resist comprises a thermoresist, and wherein said selective removing comprises melting a portion of the thermoresist and removing the melted portion of the thermoresist from the reactive layer.

Claim 10. **[Previously Presented]** The method of claim 9, where said melting is performed with a heated stamp applied to an exposed face of the thermoresist.

Claim 11. **[Previously Presented]** The method of claim 9, wherein said melting is performed with heating means incorporated in the solid support beneath the thermoresist.

Claim 12. **[Previously Presented]** The method of claim 1, wherein said selective removing comprises enzymatically removing a portion of the biologically compatible resist.

Claim 13. **[Previously Presented]** The method of claim 1, further comprising modifying the reactive layer to improve conjugatability with reactive groups of the molecules.

Claim 14. **[Currently Amended]** The method of claim 1, further comprising modifying the molecules to improve conjugatability with reactive groups ~~of the~~ of the reactive layer.

Claim 15. **[Previously Presented]** The method of claim 1, wherein the molecules comprise biomolecules.

Claim 16. **[Previously Presented]** The method of claim 15, wherein the molecules comprise one, two, three or more protein species.

Claim 17. **[Previously Presented]** The method of claim 15, wherein the molecules comprise one, two, three or more enzyme species.

Claim 18. **[Previously Presented]** The method of claim 15, wherein the molecules comprise one, two, three or more antibody species.

Claim 19. **[Previously Presented]** The method of claim 15, wherein the molecules comprise one, two, three or more receptor molecule species.

Claim 20. **[Previously Presented]** The method of claim 1, wherein the molecules comprise one, two, three or more nucleic acid molecule species.

Claim 21. **[Previously Presented]** The method of claim 1, wherein the exposed portion and the molecules comprise a first exposed portion and a first molecular species, respectively, and wherein the method further comprises the steps of:
(d) coating the biologically compatible resist on the first molecular species conjugated to the first exposed portion of the reactive layer;
(e) selectively removing a second portion of the biologically compatible resist to expose a second exposed portion of the reactive layer;
and
(f) conjugating a second molecular species with the second exposed portion of the reactive layer.

Claim 22. **[Previously Presented]** The method of claim 21, wherein the first and second molecular species are conjugated with the reactive layer sequentially.

Claim 23. **[Withdrawn]** A material comprising a reactive layer having a surface, the surface comprising a first surface region conjugated to a first molecular species and a second surface region coated with a biologically compatible resist.

Claim 24. **[Withdrawn]** A material according to claim 23, wherein the reactive layer comprises a polysaccharide mass.

Claim 25. **[Withdrawn]** The material of claim 23, wherein the surface comprises a third surface region conjugated to a second molecular species differing from the first molecular species.

Claim 26. **[Withdrawn – Currently Amended]** A device ~~comprising~~ comprising a reactive layer having a surface, the surface comprising a first surface region conjugated to a first molecular species and a second surface region coated with a biologically compatible resist.

Claim 27. **[Withdrawn – Currently Amended]** The device of claim 25, wherein said device comprises a ~~microelectromechanical~~ micro-electromechanical system.